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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,538	09/27/2001	Takayo Katsuki	36856.550	8080

7590 09/26/2003  
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EXAMINER

EASTHOM, KARL D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/965,538

Applicant(s)

KATSUKI ET AL.

Examiner

Karl D Easthom

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 3-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "substantially" in claim is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. See also Exxon Research and Engineering Co. V. United States (USFedCir)54 USPq2d 1519 (3/9/2000)(holding "substantially" is vague as a term of degree absent guidelines). The term "substantially" here is vague where applicant argues terms it modifies define over the prior art.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Katsuki et al. '779. Katsuki discloses the claimed invention at Fig. 1 with junction portion 111a, short vertical leg portion adjacent the label "Fig. 1" and lower end portion of 111 rests on the circuit board.. Katsuki et al. also discloses the claimed invention at Figs. 7 or 3, where 30a 121a, or

the part of 111a are vertical leg portion since 30a has a vertical part where the button part meets extends down to meet the horizontal part 30, and 121a and 111 have vertically extending parts from the electrodes 111a or 101. Or, element 421 has a bent vertical portion as described at col. 7, lines 31-47 since it is "rectangular" instead of "circular" as depicted, meeting claim 2, "in the vicinity of the center. Or, element 431 at Fig. 7 or element 121 at Fig. 3 are bent vertically at an angle of about 90 degrees, with a lower-end portion substantially parallel to the junction portion where the junction portion has a finite area on top that is flat. The portion of upper terminal 5, 114 or 124 is extended downward - either the parts on the outside of the case, or the part 54 touching the thermistor in Fig. 7.. (Either of these is a vertical leg portion meeting claim 9, with the bent part 51 and the part 54 meets claim 9). Also the portion of 4 outside or inside the case at Fig. 7 extends downward as seen. The horizontal connection portion of claim 7 is 41 since it is bent and connects to a substrate. The junction portion is mechanically attached to one of the electrodes 24 due to the force of the electrode 51.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frielinghaus in view of Turner. Frielinghaus discloses at Fig. 3 the claimed invention except the resistor being PTC. Turner discloses using similar lead attachments for all resistors, PTC or

NTC or otherwise at col. 2, lines 14-33, and discloses using thermistors at col. 4, lines 33-65 to protect equipment, , the same employment of the resistor disclosed by Frielinghaus at col. 1, where a fail safe circuit is disclosed, such that it would have been obvious to replace the resistor of Frielinghaus with a PTC resistor. The upper and lower terminals in Frielinghaus are 20, the junction portion, the short-vertical leg portion and the lower-end portion are all depicted as part of 16 as clearly seen at Fig. 3. In claim 3, the leads 14 overlap with those 16. In claim 4, the button shape is seen. In claim 7, the bent part is where 14 points in Fig. 3. In claim 8, the connection is only "near" the central portion. In claims 9-10, the one vertical portion of 14 is longer than the shorter vertical leg portion of 16, where each lead has two such portions. The device is mounted on printed circuit boards at top of col. 1 so it is "surface-mountable".

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camp or Katsuki et al. '779, I or Frielinghaus with Turner, in view of, or further in view n view of Nagao et al. The claimed invention is as disclosed above except for the electrode material. Nagao discloses such a material at the abstract as conventional and for improving flash resistance, see col. 6 and table 5. It would have been obvious to employ the well known material in the manner of Nagao to improve the flash resistance.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuki et al. '779, or Frielinghaus with Turner, in view of, or further in view of Ikeda et al. The claimed invention is as disclosed as noted above except for the electrode material. Ikeda discloses such a material at col. 10, lines 1-5 as a good elastic material for improving thermistors, such that it

would have been obvious to employ the well known material in the manner of Ikeda to improve the elasticity.

9. Applicant's arguments filed 8/20/03 have been fully considered but they are moot, or persuasive only as to the removed rejections. Applicant argues that Katsuki et al. does not disclose the vertical-leg portion that is substantially perpendicular over a substantial portion of the length. This is not correct because the term "substantially" is broad enough to cover the leg portions 121 or 421 as seen at Figs. 3 and 7. Applicant agrees that "a portion of the profusion 421 ...extends substantially perpendicular to the thermistor body". Applicant argues that this does not occur over "substantially" the entire length of the vertical portion. Thus the argument is over whether the portion is substantially the entire portion. Since the term is broad, and not defined, it is met. This means the argument is over what the term "substantially" means. This is related to the argument concerning the term "about" or "substantially" as one of degree, and that the Examiner is expanding the scope too much, this is not correct. Applicant argues Amgen does not speak to the term "about" but only "at least about". This is not correct. The "at least" portion is clearly not that to which Amgen spoke. The phrase is vague because of "about", not because of "at least". Amgen is directly on point and states that "Because the term "about" 160000 gives no hint as to which mean value between the Miyake et al. [prior art value] of 128,620 and the mean specific...[claimed] level of 160,000 constitutes infringement", the court held the "at least about" claims to be invalid for indefiniteness". The Court affirmed the lower court reasoning. This is the situation here. Applicant provides no definition for what constitutes infringement between the mean value of the prior art angle which looks to be about

45-70 degrees angle over most of the length of the vertical portion. Similarly, nor does applicant supply what portion of the length is substantially the entire portion. If applicant cannot point to the limits of his claims so that no infringement would occur but also such that his claims distinguish over the prior art, then Amgen dictates the claims are not clear. See also Exxon Research and Engineering Co. V. United States (USFedCir)54 USPq2d 1519 (3/9/2000)(holding "substantially" is vague as a term of degree absent guidelines). The Examiner has no choice but to follow what Amgen dictates. Also, MPEP 2173.05(b) clearly indicates that greater criticality as to the meaning of the terms specificity is required where the element of degree relied upon is the element argued to distinguish the claims over the prior art. See Amgen, Inc. V. Chugai Pharmaceutical Co., 18 USPQ2dn 1016 (Fed.Cir. 1991). As there is no such limiting definitions in the specification and applicant appears to be arguing that the flexible terms define over the art, the broad interpretations by the Examiner are not undue.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
**KARL D. EASTHOM**  
**PRIMARY EXAMINER**